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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,539

02/28/2007

Hitoshi Suzuki

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EDWARDS ANGELL PALMER & DODGE LLP
P.O. BOX 55874
BOSTON, MA 02205

EXAMINER

JENNINGS, STEPHANIE M

ART UNIT

PAPER NUMBER

4135

MAIL DATE

DELIVERY MODE

12/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,539	Applicant(s) SUZUKI ET AL.	
	Examiner STEPHANIE JENNINGS	Art Unit 4135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060222, 20051219</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because legal terminology "means" is used in line 6. Correction is required. See MPEP § 608.01(b).

Claim Objections

1. Claim 10 is objected to because of the following informalities: grammatical error in claim-- "one ends" should be "one end". Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "substantially" indicates a term of relative degree and renders the claim unclear as to exact limits of the claimed invention.

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3. Claims 10, 11, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant in the claim language with the phrase "the other pressing members."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 9, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto Japanese Utility Model Publication No. SHO 51-139427 A (listed on applicant's Information Disclosure Statement).

6. Yamamoto anticipates:

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图 1

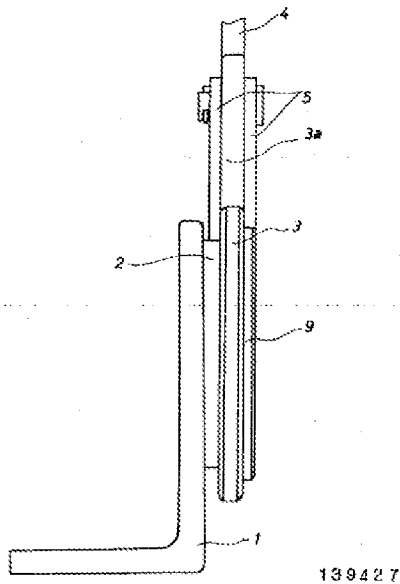
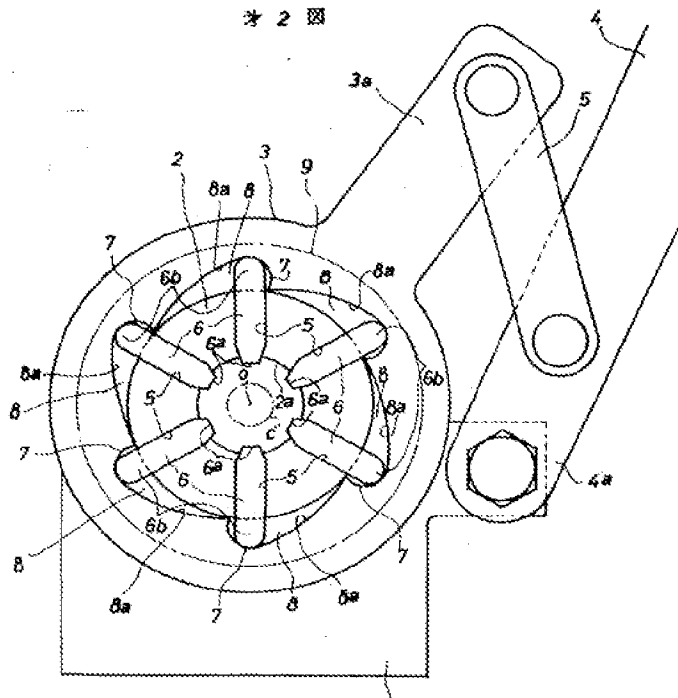


图 2



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图 3

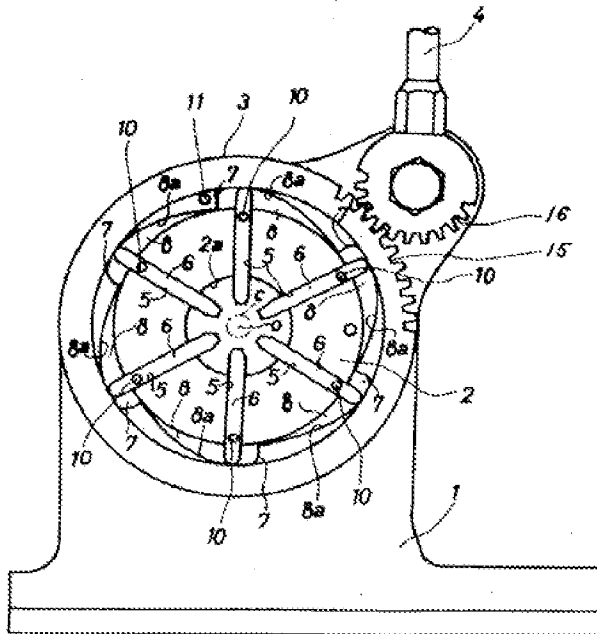
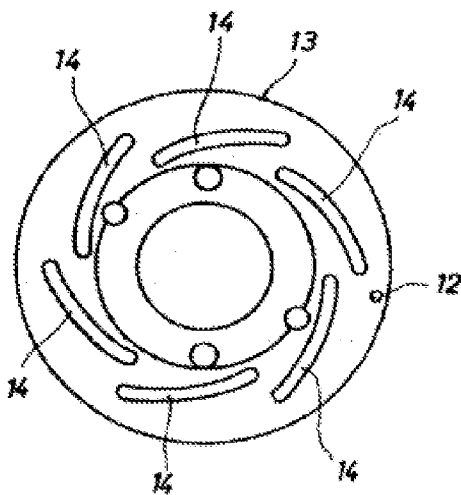


图 4



7. Limitations from claim 9, a ring compression device (figure 2) that applies force on a periphery of a ring to thereby compressing the ring (C, figure 2) and fixing the ring on a

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mounting body (not shown) placed inside the ring (C), comprising: a non-rotatable substrate having a central axis; a plurality of longitudinal pressing members (6) arranged on a first plane different from that of the substrate (1, figure 1 and figure 1 overall) and radially around the central axis with one ends pointing toward the central axis, the pressing members capable of freely moving toward or away from the central axis in the first plane; a rotating body configured to rotate around the central axis in a second plane that is parallel to the first plane; and a driving mechanism (4, 5) that engages with the rotating body and the pressing members such that when the rotating body (2, 3) rotates, all of the pressing members integrally move toward the central axis and apply force on the periphery of the ring (2, 3) with the one ends of the pressing members (6) (page 1, lines 6-10).

8. Limitations from claim 10, the ring compression device (figure 2) according to claim 9, wherein, the rotating body has an initial position at which the one end of one of the pressing members (6) is located on a circle around the central axis that corresponds substantially to the periphery of the ring and the one ends of other pressing members (6) are located outside of the circle (2, 3), and the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body (2, 3) rotates, the one ends of the other pressing members (6) move toward the circle (2, 3), and once the one ends of the other pressing members are located on the circle (2, 3), all the pressing members (6) move toward the central axis (O) (page 3, line 1-25).

9. Limitations from claim 12, the ring compression device (figure 2) according to claim 9, further comprising a holding mechanism (7, 8) configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis (O) (page 1, lines 29-32).

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10. Limitations from claim 13, the ring compression device according to claim 9, further comprising a holding mechanism (6) configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis (O), wherein, in an initial state, the one end of one of the pressing members (6) is located on a circle (2, 3) with the central axis (O) as a center and diameter of the ring (C) as a diameter, and the one ends of other pressing members are located outside of the circle (2, 3), wherein the driving mechanism (4) engages with the rotating body (2, 3) and the pressing members (6) such that, when the rotating body rotates, the one ends of the other pressing members (6) move toward the circle (2, 3), and once the one ends of the other pressing members (6) are located on the circle (2, 3), all the pressing members (6) move toward the central axis (O) (page 3, lines 1-5).

11. Limitations from claim 15, a ring compression method of applying force on a ring (C) to fix the ring on a mounting body, comprising: hooking the ring with one ends of a plurality of longitudinal pressing members (6) that can freely move in a plane and in a radial direction with respect to an axis; inserting the mounting body into a bore (O) of the ring (C) and holding the body in such a manner that the mounting body is aligned with the axis; and forcibly moving the one ends of the pressing members (6) toward the axis to thereby apply force on the ring (C) (page 3, lines 1-25).

12. Limitations from claim 16, The ring compression method according to claim 15, further comprising: first controlling, before the hooking, such that the one end of one of the pressing members (6) is located on a circle with the axis as a center (O) and diameter of the ring (C) as a diameter, and the one ends of other pressing members are located outside of the circle; and second controlling, before the hooking and after the first controlling, such that the one ends of

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the other pressing members move toward the circle (2, 3), and once the one ends of the other pressing members (6) are located on the circle, all the pressing members move toward the central axis (O) (page 3, lines 1-25).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto Japanese Utility Model Publication No. SHO 51-139427 A.

17. Yamamoto teaches:

18. Limitations from claim 12, the ring compression device (figure 2) according to claim 9, further comprising a holding mechanism (4, 6) configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis (O) (figure 3).

19. Yamamoto discloses the claimed invention except for a holding mechanism configured to hold the mounting body so that it is aligned to the central axis. It would have been obvious matter of design to configure the mounting body in such a fashion, since applicant has not disclosed that solves any stated problems or is for any particular purpose and it appears that the invention would perform equally well with the mounting body aligned in a different fashion.

20. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto as applied to claim 9 above, and further in view of Meiji Rubber and Chemical Co. Ltd. Japanese Patent Application Abstract 03-238124 (listed on applicant's Information Disclosure Statement).

21. Yamamoto teaches a ring compression device, but does not teach a ring compression device with a moveable claw member abutting the edge face of the ring on the tip side of the pressing. Meiji, however, does teach this feature.

22. Meiji teaches:

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23. Limitations from claim 11, also having a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member (abstract, constitution).

24. Limitations from claim 14, a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member (abstract, constitution).

25. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Meiji's invention with Yamamoto's invention because a moveable claw member on the pressing member allows for greater adjustability and correction of potential errors during the attachment of the ring or clamp to the mounting body.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE JENNINGS whose telephone number is (571)270-7392. The examiner can normally be reached on M-F, 7:30 am-5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William M. Brewster can be reached on (571)272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./

Examiner, Art Unit 4135

December 19, 2008

/William M. Brewster/

Supervisory Patent Examiner, Art Unit 4135